

List of publications

- Jiaqi Wu, Kirill Kryukov, Junko S. Takeuchi, So Nakagawa (2024) **“Sgv-Caller: Sars-Cov-2 Genome Variation Caller”** SSRN preprint:
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4881790
- Alexey P. Kryukov, Kirill A. Kryukov, Bohao Fang, Katherene Collier, Scott Edwards (2024) **“Mitogenomics clarifies the position of the Nearctic magpies (*Pica hudsonia* and *Pica nuttalli*) within the Holarctic magpie radiation”** *Current Zoology*, in press, epub: 1 Nov 2023 (accepted on October 27, 2023), doi: 10.1093/cz/zoad048.
- Kosuke Takada, So Nakagawa, Kirill Kryukov, Makoto Ozawa, Tokiko Watanabe (2024) **“Metagenomic analysis of the gut microbiota of hooded cranes (*Grus monacha*) on the Izumi plain in Japan”** *FEBS Open Bio*, in press (accepted on August 1, 2024).
- Kirill Kryukov, Naoyuki Nakahama, Shigehiro Kuraku (2024) **“Genome assembly catalog for species in the Japanese Red List: unlocking endangered biodiversity through genomic inventory”** [version 2; peer review: 2 approved] *F1000Research*, **13**, 583, 22 July 2024 (accepted on July 23, 2024), doi: 10.12688/f1000research.149793.2, PMID: 39050029.
- Kentaro Harakawa, Shinpei Kawarai, Kirill Kryukov, So Nakagawa, Shigeharu Moriya, and Kazuhiko Imakawa (2024) **“Buccal Swab Samples from Japanese Brown Cattle Fed with Limonite Reveal Altered Rumen Microbiome”** *Animals*, **14**(13), 1968, July 3, 2024 (accepted on July 1, 2024), doi: 10.3390/ani14131968, PMID: 38998081.
- Jakaria Al-Mujahidy, Kirill Kryukov, Kei Saito, Kazuho Ikeo (2024) **“Functional Genomic Analysis of the Isolated Potential Probiotic *Lactobacillus delbrueckii* subsp. *indicus* TY-11, and its Comparison with other *Lactobacillus delbrueckii* Strains”** *Microbiology Spectrum*, **12**(7), e03470-23, July 2, 2024, published online on May 21, 2024 (accepted on April 11, 2024), doi: 10.1128/spectrum.03470-23, PMID: 38771133.
- Kirill Kryukov, So Nakagawa, Tadashi Imanishi (2024) **“GenomeSync: a synchronizable database of genome sequences”** *iDarwin*, vol. 4, 4-23, 13 March 2024.
- So Nakagawa, Toshiaki Katayama, Lihua Jin, Jiaqi Wu, Kirill Kryukov, Rise Oyachi, Junko S. Takeuchi, Takatomo Fujisawa, Satomi Asano, Momoka Komatsu, Jun-ichi Onami, Takashi Abe, Masanori Arita (2023) **“SARS-CoV-2 HaploGraph: visualization of SARS-CoV-2 haplotypes spread in Japan”** *Genes & Genetic Systems*, **2023**, 23-00085, October 14, 2023 (accepted on June 10, 2023), doi: 10.1266/ggs.23-00085, PMID: 37839865, Jxiv preprint: <https://jxiv.jst.go.jp/index.php/jxiv/preprint/view/338>.
- Ricky Indra Alfaray, Batsaikhan Saruuljavkhlan, Kartika Afrida Fauzia, Roberto C. Torres, Kaisa Thorell, Selva Rosyta Dewi, Kirill A. Kryukov, Takashi Matsumoto, Junko Akada, Ratha-korn Vilaichone, Muhammad Miftahussurur, Yoshio Yamaoka (2023) **“Global Antimicrobial Resistance Gene Study of *Helicobacter pylori*: Comparison of Detection Tools, ARG and Efflux Pump Gene Analysis, Worldwide Epidemiological Distribution, and Information Related to the Antimicrobial-Resistant Phenotype”** *Antibiotics*, **12**(7), 1118, June 28, 2023 (accepted on June 25, 2023), doi: 10.3390/antibiotics12071118, PMID: 37508214.
- Kirill Kryukov, Tadashi Imanishi, So Nakagawa (2023) **“Nanopore sequencing data analysis of 16S rRNA genes using GenomeSync-GSTK system”** *Methods in Molecular Biology*, Vol. 2632, 215-226, 14 February 2023, Kazuharu Arakawa (Eds): Nanopore Sequencing, doi: 10.1007/978-1-0716-2996-3_15, PMID: 36781731, book ISBN: 978-1-0716-2995-6.
- Jianshi Jin, Taisaku Ogawa, Nozomi Hojo, Kirill Kryukov, Kenji Shimizu, Tomokatsu Ikawa, Tadashi Imanishi, Taku Okazaki, Katsuyuki Shiroguchi (2023) **“Robotic data acquisition with**

deep learning enables cell image-based prediction of transcriptomic states” *PNAS*, **120**(1), e2210283120, 3 Jan 2023, epub: 28 Dec 2022 (accepted on November 30, 2022), doi: 10.1073/pnas.2210283120, PMID: 36577074.

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Kirill Kryukov, Lihua Jin, So Nakagawa (2022) **“Efficient compression of SARS-CoV-2 genome data using Nucleotide Archival Format (NAF)”** *Patterns*, **3**(9), 100562, 9 September 2022, epub: 6 July 2022 (accepted: 1 July 2022), doi: 10.1016/j.patter.2022.100562, PMID: 35818472.

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Shinnosuke Komiya, Yoshiyuki Matsuo, So Nakagawa, Yoshiharu Morimoto, Kirill Kryukov, Hidetaka Okada, Kiichi Hirota (2022) **“MinION™, a portable long-read sequencer, enables rapid vaginal microbiota analysis in a clinical setting”** *BMC Medical Genomics*, **15**, 68, 25 March 2022, doi: 10.1186/s12920-022-01218-8, PMID: 35337329.

Yoshiki Shiraishi, Kirill Kryukov, Katsuyoshi Tomomatsu, Fumio Sakamaki, Shigeaki Inoue, So Nakagawa, Tadashi Imanishi, Koichiro Asano (2021) **“Diagnosis of pleural empyema/parapneumonic effusion by next-generation sequencing”** *Infectious Diseases*, **53**(6), 450-459, epub: 9 March 2021, doi: 10.1080/23744235.2021.1892178, PMID: 33689538.

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- Kirill Kryukov, Mahoko Takahashi Ueda, So Nakagawa, Tadashi Imanishi (2020) **“Sequence Compression Benchmark (SCB) database — a comprehensive evaluation of reference-free compressors for FASTA-formatted sequences”** *GigaScience*, **9**(7), g1aa072, 6 July 2020, doi: 10.1093/gigascience/g1aa072, PMID: 32627830.
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